

AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A computer-implemented method of generating a shadow for a three-dimensional model having an infrastructure that includes a virtual bone, the method comprising:

projecting the virtual bone onto a surface; and
generating the shadow on the surface based on a projection of the virtual bone,
wherein the shadow comprises a shape that is formed on the projection of the virtual bone,
and wherein generating comprises forming the shape by distorting at least part of the
projection of the virtual bone.

2. (Currently Amended) The method of claim 1, further comprising locating a virtual light source in an environment that the three-dimensional model inhabits;

wherein projecting the virtual bone comprises:

drawing lines from the virtual light source, through points on the virtual bone, onto the surface; and

connecting points at which the lines intersect the surface.

3. (Currently Amended) The method of claim 1, wherein generating the shadow further comprises:

~~creating a shape over at least part of the projection of the bone; and~~
mapping texture onto the shape.

4. (Currently Amended) The method of claim 3, wherein ~~creating~~ forming the shape comprises obtaining a polygon from the projection of the virtual bone.

5. (Currently Amended) The method of claim 3 ~~4~~, wherein mapping texture onto the shape comprises mapping a fuzzy texture onto edges of the shape.

6. (Original) The method of claim 1, further comprising receiving data that corresponds to a size and shape of the shadow;
wherein the shadow is generated based on the data.

7. (Currently Amended) A computer-implemented method of generating a shadow for a three-dimensional model having an infrastructure that includes a virtual bone, the method comprising:

generating a bounding volume for the virtual bone, the bounding volume having a shape that substantially corresponds to a shape of the virtual bone, wherein generating the

bounding volume comprises expanding the virtual bone in three-dimensional space; and

generating the shadow by projecting a shape of the bounding volume onto a surface.

8. (Original) The method of claim 7, further comprising locating a virtual light source in an environment that the three-dimensional model inhabits;

wherein projecting the shape comprises:

drawing lines from the virtual light source, through locations on a surface of the bounding volume, onto the surface; and

connecting points at which the lines intersect the surface.

9. (Original) The method of claim 7, wherein generating the shadow further comprises mapping a texture onto the shape of the bounding volume projected onto the surface.

10. (Original) The method of claim 7, further comprising receiving data that corresponds to a size and shape of the shadow;

wherein the shadow is generated based on the data.

11. (Currently Amended) An article comprising a machine-readable medium that stores executable instructions to generate a shadow for a three-dimensional model having an infrastructure that includes a virtual bone, the instructions causing a machine to:

project the virtual bone onto a surface; and

generate the shadow on the surface based on a projection of the virtual bone,
wherein the shadow comprises a shape that is formed on the projection of the virtual bone,
and wherein generating comprises forming the shape by distorting at least part of the
projection of the virtual bone.

12. (Currently Amended) The article of claim 11, further comprising instructions to
locate a virtual light source in an environment that the three-dimensional model inhabits;

wherein projecting the virtual bone comprises:

drawing lines from the virtual light source, through points on the virtual
bone, onto the surface; and

connecting points at which the lines intersect the surface.

13. (Currently Amended) The article of claim 11, wherein generating the shadow
comprises:

~~creating a shape over at least part of the projection of the bone; and~~
mapping texture onto the shape.

14. (Currently Amended) The article of claim 13, wherein ~~creating~~ forming the
shape comprises obtaining a polygon from the projection of the virtual bone.

15. (Currently Amended) The article of claim 13 ~~14~~, wherein mapping texture onto
the shape comprises mapping a fuzzy texture onto edges of the shape.

16. (Original) The article of claim 11, further comprising instructions to receive data that corresponds to a size and shape of the shadow;
wherein the shadow is generated based on the data.

17. (Currently Amended) An article comprising a machine-readable medium to generate a shadow for a three-dimensional model having an infrastructure that includes a virtual bone, the instructions causing a machine to:
generate a bounding volume for the virtual bone; and
generate the shadow by projecting a shape of the bounding volume onto a surface,
the bounding volume having a shape that substantially corresponds to a shape of the virtual bone, wherein generating the bounding volume comprises expanding the virtual bone in three-dimensional space.

18. (Original) The article of claim 17, further comprising instructions to locate a virtual light source in an environment that the three-dimensional model inhabits;

wherein projecting the shape comprises:

drawing lines from the virtual light source, through locations on a surface of the bounding volume, onto the surface; and

connecting points at which the lines intersect the surface.

19. (Original) The article of claim 17, wherein generating the shadow further comprises mapping a texture onto the shape of the bounding volume projected onto the surface.

20. (Original) The article of claim 17, further comprising instructions to receive data that corresponds to a size and shape of the shadow;
wherein the shadow is generated based on the data.

21. (Currently Amended) An apparatus for generating a shadow for a three-dimensional model having an infrastructure that includes a virtual bone, the apparatus comprising:

a memory that stores executable instructions; and

a processor that executes the instructions to:

project the virtual bone onto a surface; and

generate the shadow on the surface based on a projection of the virtual bone,
wherein the shadow comprises a shape that is formed on the projection of the virtual bone, and wherein generating comprises forming the shape by distorting at least part of the projection of the virtual bone.

22. (Currently Amended) The apparatus of claim 21, wherein the processor executes instructions to locate a virtual light source in an environment that the three-dimensional model inhabits; and

wherein projecting the bone comprises:

drawing lines from the virtual light source, through points on the virtual
bone, onto the surface; and
connecting points at which the lines intersect the surface.

23. (Currently Amended) The apparatus of claim 21, wherein generating the shadow comprises:

~~creating a shape over at least part of the projection of the bone; and~~
mapping texture onto the shape.

24. (Currently Amended) The apparatus of claim 23, wherein ~~creating~~ forming the shape comprises obtaining a polygon from the projection of the virtual bone.

25. (Currently Amended) The apparatus of claim 23 ~~24~~, wherein mapping texture onto the shape comprises mapping a fuzzy texture onto edges of the shape.

26. (Original) The apparatus of claim 21, wherein:
the processor executes instructions to receive data that corresponds to a size and shape of the shadow; and
the shadow is generated based on the data.

27. (Currently Amended) An apparatus for generating a shadow for a three-dimensional model having an infrastructure that includes a virtual bone, the apparatus comprising:

a memory that stores executable instructions; and

a processor that executes the instructions to:

generate a bounding volume for the virtual bone, the bounding volume having a shape that substantially corresponds to a shape of the virtual bone, wherein generating the bounding volume comprises expanding the virtual bone in three-dimensional space; and

generate the shadow by projecting a shape of the bounding volume onto a surface.

28. (Original) The apparatus of claim 27, wherein the processor executes instructions to locate a virtual light source in an environment that the three-dimensional model inhabits; and

wherein projecting the shape comprises:

drawing lines from the virtual light source, through locations on a surface of the bounding volume, onto the surface; and

connecting points at which the lines intersect the surface.

29. (Original) The apparatus of claim 27, wherein generating the shadow further comprises mapping a texture onto the shape of the bounding volume projected onto the

surface.

30. (Original) The apparatus of claim 27, wherein
the processor executes instructions to receive data that corresponds to a size and
shape of the shadow; and
the shadow is generated based on the data.